

Note to Readers: If you need assistance accessing items in this Supplemental Material, please contact ehp508@niehs.nih.gov. Our staff will work with you to assess and meet your accessibility needs within 3 working days.

Table of Contents for Supplemental Material

Forest Fire Smoke Exposures and Out-of-Hospital Cardiac Arrests in Melbourne, Australia: A Case-Crossover Study

Martine Dennekamp, Lahn D. Straney, Bircan Erbas, Michael J. Abramson, Melita Keywood, Karen Smith, Malcolm R. Sim, Deborah C. Glass, Anthony Del Monaco, Anjali Haikerwal, and Andrew M. Tonkin

1. Criteria for the identification of fire-hours

Figure S1. Time series of hourly concentrations of PM_{2.5} and CO. Filled in circles represent fire periods, lines represent concentration of PM_{2.5} in the top figure and CO in the bottom figure.

Figure S2. Hourly PM_{2.5} and CO concentrations as a function of wind direction. Diameter of the circle represents concentration (also represented by the vertical axis with the scale and units i.e. for the left diagram, the diameter of the circle represents PM_{2.5} concentration of 30 $\mu\text{g m}^{-3}$ from the centre of the circle to the circumference of the circle; for the right hand diagram the diameter of the circle represents CO concentration of 450 ppb from the centre of the circle to the circumference of the circle. North is represented by 0 on the circumference of the circle east by 90, south by 180 and west by 270.

Table S1. Selection criteria for smoke impacted periods.

2. Methodology - calculation of excess out-of-hospital cardiac arrests

1. Model-derived calculation

2. Direction calculation

Table S2. Estimated percentage difference in the relative odds of out-of-hospital cardiac arrest for an interquartile range increase in individual pollutants based on conditional logistic regression models adjusted for temperature and relative humidity. Single Pollutant models by age, sex and non-fire vs fire period.